

WHAT IS CLAIMED IS:

1. A connector pin assembly comprising:

a body having a passage longitudinally extending through an outer
5 surface thereof and having a polygonally shaped side surface section;

a lock member received in said passage and circumscribed by said
side surface section, said lock member being rotatable relative to said
body between locking and unlocking positions; and

a resilient detent structure carried by said lock member for rotation
10 therewith relative to said body and being circumscribed by said side
surface section, said resilient detent structure being operative to
releasably retain said lock member in either of said locking and unlocking
positions and being slidably engageable with and deformable by said side
surface section, during rotation of said lock member relative to said body,
15 in a manner yieldingly resisting rotation of said lock member relative to
said body from said locking to said unlocking position.

2. The connector pin assembly of Claim 1 wherein:

said resilient detent structure circumscribes said lock member.

3. The connector pin assembly of Claim 2 wherein:

said resilient detent structure, when said lock member is in either of
said locking and unlocking positions, is complementarily received in said
polygonally shaped side surface section.

4. The connector pin assembly of Claim 3 wherein:

said resilient detent structure has a square configuration.

5. The connector pin assembly of Claim 1 wherein:
said polygonally shaped side surface section has a square shape.

6. The connector pin assembly of Claim 1 wherein:

5 said lock member has a retaining member thereon which engages
said body in a manner captively retaining said lock member in said
passage.

7. The connector pin assembly of Claim 6 wherein:

10 said retaining member is a snap ring received in an interior side
surface groove of said passage.

8. The connector pin assembly of Claim 1 wherein:

15 said body has an elongated shape with an exterior side surface that
extends between opposite end portions of said body, outwardly
circumscribes said passage, and is substantially parallel to the length of
said body.

9. The connector pin assembly of Claim 1 wherein:

20 said lock member has a generally cylindrical portion with an outer
end from which a locking lobe transversely projects.

10. The connector pin assembly of Claim 9 wherein:

25 said outer end has a noncircularly cross-sectioned rotational driving
portion thereon.

11. The connector pin assembly of Claim 10 wherein:
said rotational driving portion projects longitudinally outwardly
from said locking lobe.

5 12. The connector pin assembly of Claim 1 wherein:
said lock member has a slot extending therethrough and opening
outwardly through opposite outer side portions thereof, and
said resilient detent structure includes a resilient detent member
extending through said slot and having opposite end portions projecting
10 outwardly beyond said opposite outer side portions of said lock member
and engaging circumferentially spaced apart portions of said polygonally
shaped side surface section.

13. The connector pin assembly of Claim 12 further comprising:
15 an annular bushing circumscribing a portion of said lock member
and being press-fitted into said passage, said bushing captively retaining
said resilient detent structure within said polygonally shaped side surface
section.

20 14. The connector pin assembly of Claim 13 further comprising:
an O-ring seal member carried by said lock member and sealingly
engaging a circular interior side surface portion of said bushing.

15. The connector pin assembly of Claim 1 wherein:
25 said connector pin assembly is configured to be operatively inserted
into aligned openings in telescoped excavating wear and support
members to captively retain them in a telescoped relationship.

16. A connector pin assembly comprising:

a body having a passage longitudinally extending inwardly through an outer surface thereof, said passage having a noncircularly shaped side surface section;

5 a lock member received in said passage and circumscribed by said side surface section, said lock member being rotatable relative to said body; and

a resilient detent member carried by said lock member for rotation therewith and having a periphery circumscribing said lock member, said
10 periphery complementarily and slidably engaging said noncircularly shaped side surface section.

17. The connector pin assembly of Claim 16 wherein:
said side surface section has a polygonal shape.

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18. The connector pin assembly of Claim 17 wherein:
said polygonal shape is a square shape.

19. The connector pin assembly of Claim 16 wherein:

20 said body has an elongated shape with an exterior side surface that extends between opposite end portions of said body, outwardly circumscribes said passage, and is substantially parallel to the length of said body.

25 20. The connector pin assembly of Claim 16 wherein:

said connector pin assembly is configured to be operatively inserted into aligned openings in telescoped excavating wear and support members to captively retain them in a telescoped relationship.

21. A connector pin assembly comprising:

a body having a passage longitudinally extending inwardly through an outer surface thereof, said passage having a noncircularly shaped side surface section;

5 a lock member received in said passage and circumscribed by said side surface section, said lock member being rotatable relative to said body and having a slot extending therethrough and opening outwardly through opposite outer side surface portions of said lock member; and

a resilient detent member extending through said slot and having
10 opposite end portions projecting outwardly beyond said outer side surface portions and slidably engaging said noncircularly shaped side surface section of said passage.

22. The connector pin assembly of Claim 21 wherein:

15 said side surface section has a polygonal shape.

23. The connector pin assembly of Claim 22 wherein:

said polygonal shape is a square shape.

20 24. The connector pin assembly of Claim 21 wherein:

said body has an elongated shape with an exterior side surface that extends between opposite end portions of said body, outwardly circumscribes said passage, and is substantially parallel to the length of said body.

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25. The connector pin assembly of Claim 21 wherein:

said connector pin assembly is configured to be operatively inserted into aligned openings in telescoped excavating wear and support members to captively retain them in a telescoped relationship.

26. A connector pin assembly and associated apparatus comprising:
first and second telescoped members having aligned connector
openings therein; and

a connector pin assembly captively retaining said first and second
5 members in a telescoped relationship, said connector pin assembly
including:

a body removably received in said aligned connector openings
and blocking separation of said first and second members from one
another, said body having a passage extending inwardly through an outer
10 surface thereof, said passage having a noncircularly shaped side surface
section,

a lock member received in said passage and circumscribed by
said side surface section, said lock member being rotatable relative to said
body between a locking position in which said lock member blocks
15 removal of said body from said connector openings, and an unlocking
position in which said lock member permits removal of said body from
said connector openings, and

a resilient detent member carried by said lock member for
rotation therewith and being operative to releasably retain said lock
20 member in said locking position, said detent member having a periphery
circumscribing said lock member, said periphery complementarily and
slidably engaging said noncircularly shaped side surface section.

27. The connector pin assembly and associated apparatus of Claim 26
25 wherein:

said first member is an excavating support member, and
said second member is an excavating wear member.

28. The connector pin assembly and associated apparatus of Claim 27
wherein:

said excavating support member is an adapter, and
said excavating wear member is a tooth point.

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29. The connector pin assembly and associated apparatus of Claim 26
wherein:

said side surface section has a polygonal shape.

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30. The connector pin assembly and associated apparatus of Claim 29
wherein:

said polygonal shape is a square shape.

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31. The connector pin assembly and associated apparatus of Claim 26
wherein:

said body has an elongated shape with an exterior said surface that
extends between opposite end portions of said body, outwardly
circumscribes said passage, and is substantially parallel to the length of
said body.

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32. A connector pin assembly and associated apparatus comprising:
first and second telescoped members having aligned connector
openings therein; and

a connector pin assembly captively retaining said first and second
5 members in a telescoped relationship, said connector pin assembly
including:

a body removably received in said aligned connector openings
and blocking separation of said first and second members from one
another, said body having a passage extending inwardly through an outer
10 surface thereof, said passage having a noncircularly shaped side surface
section,

a lock member received in said passage and circumscribed by
said side surface section, said lock member having a slot extending
therethrough and opening outwardly through opposite outer side surface
15 portions of said lock member, said lock member being rotatable relative
to said body between a locking position in which said lock member blocks
removal of said body from said connector openings, and an unlocking
position in which said lock member permits removal of said body from
said connector openings, and

20 a resilient detent member carried by said lock member for rotation
therewith and being operative to releasably retain said lock member in
said locking position, said detent member extending through said slot and
having opposite end portions projecting outwardly beyond said outer side
surface portions and slidably engaging said noncircularly shaped side
25 surface section of said passage.

33. The connector pin assembly and associated apparatus of Claim 32 wherein:

said first member is an excavating support member, and
said second member is an excavating wear member.

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34. The connector pin assembly and associated apparatus of Claim 33 wherein:

said excavating support member is an adapter, and
said excavating wear member is a tooth point.

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35. The connector pin assembly and associated apparatus of Claim 32 wherein:

said side surface section has a polygonal shape.

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36. The connector pin assembly and associated apparatus of Claim 35 wherein:

said polygonal shape is a square shape.

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37. The connector pin assembly and associated apparatus of Claim 36 wherein:

said body has an elongated shape with an exterior said surface that extends between opposite end portions of said body, outwardly circumscribes said passage, and is substantially parallel to the length of said body.

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